Iowa Statewide Interoperable Communications System (ISICS)
Standards, Protocols, Procedures

Standard Name:	**System Maintenance: Programming and Qualifications**		Date Created:		**06-19-2018**	
Standard Policy #	**4.6.0**	**Section Title:**	**Maintenance**		Status	**DRAFT**
Approval Authority:	**ISICSB**		Adopted:		Reviewed:	

1. Purpose or Objective

The purpose of this standard is to establish minimum qualification requirements for system technical staff, both in-house and contracted. This will ensure that functionality and integrity is maintained by requiring system configuration, maintenance, and repair functions be performed by qualified personnel.

2. Technical Background

Capabilities

This standard protects the integrity of the system by ensuring training and background requirements of all personnel working on the system and by describing the authorized activities of a contract service provider who is to provide maintenance and programming services.

Constraints

Some sensitive and non-public system security information will be available to businesses and people operating outside of the ISICS platform. Standards and agreements are necessary to ensure the appropriateness of the businesses' activities and protect the integrity of the system. Programming information falls under non-public, confidential records according to Iowa Code 22.7(50).

3. Operational Context

System functionality and integrity must be maintained by ensuring that only qualified personnel perform system configuration, maintenance, and repair functions. Not all user agencies participating in the statewide system have technicians on staff to program and perform configuration, maintenance, and repair on radios and other electronic infrastructure. Agencies
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may need to contract with one or more service providers for these services at agency's expense. The choice of service provider is at the discretion of the user agency, but the contract service provider must enter into an agreement with the user agency. The user agency must ensure the requirements of this standard are met prior to and are responsible for execution of the service.

4. Recommended Protocol/ Standard

ISICS Standard 2.10.0 (Training Technical Staff) details training requirements for performing maintenance on equipment.

System Owners' Internal Technical Staff

- Employed technical staff of owning agencies will follow the same or an equivalent internal process of ensuring absence of criminal history, as outlined below in the Contract Service Providers section. The minimum standard for criminal history checks will include but may not be limited to the Interstate Identification Index (III). Other screening and/or training may also be required. If Criminal Justice Information (CJI) protected data will be within viewable or audible range of any technical staff, appropriate screening and training must be completed.
- Employed technical staff of owning agencies will follow the same process of ensuring technical competency, as outline below in the Technical Staff Requirements (Internal and External) section.
- Sub-system administrators shall maintain a list of technical training completed by internal technical staff.
- Compliance with this standard will be subject to audit.

Contract Service Providers
User agencies may contract radio programming and system infrastructure work provided the following requirements are met:

- A service shop must prove it is a qualified service center eligible to conduct business in the State of Iowa.
- A service shop must provide an insurance certificate and may, prior to commencement of work, be asked to purchase a security bond by the user agency.
- When a user agency contracts with a contract service provider for the purpose of providing maintenance, repair, programming, and related service on electronic infrastructure to include dispatch consoles and/or radio subscriber equipment, the service provider must obtain and pay for all permits, licenses, and approvals necessary for programming and maintenance to fulfill the provisions.
- Due to the sensitive and non-public nature of the programming information, the contract service provider must provide written assurance to the System Administrator and if necessary Sub-system Administrator that it is authorized and has all necessary permits and licenses to conduct business in the State of Iowa. Unless specifically authorized by the System Administrator and user, in writing and on an individual radio-by-radio basis, the contract service provider may not directly or indirectly permit any unauthorized third party to view, read, print, extract, copy, transmit, archive, edit, create, clone, transfer, release,

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tamper with, reverse engineer, or otherwise compromise key file, or any infrastructure configuration database file for any radio, console, or other infrastructure element on the system.

- The contract service shop must provide references as requested by user agencies. The System Administrator and/or the user agency may request to view the resume of any staff member of the contract service provider or to conduct background checks.
- The contracted technician must submit to a background check consistent with conditions outlined above in Section 4: *System Owners' Internal Technical Staff*. The contracting agency is responsible to ensure the background check has occurred.
- Contracting agencies shall use the contract service provider's technical staff in their certified areas of competency, as proven by vendor certification.
- The contract service provider shall maintain all training certifications for its personnel and provide copies of these certifications to System Administrators when requested.
- Contracting agencies may contract for services only for equipment they have jurisdiction over.
- Contracting agencies shall notify the appropriate Sub-System Administrator of any contract for services.

Technical Staff Requirements (Internal or External)

- The technical staff that is assigned to work on system and/or subsystem equipment shall successfully complete appropriate training on all equipment they are assigned to work on. This training will be completed prior to working on the equipment.
- The technician must have or possess satisfactory knowledge and experience in either the equipment being maintained or radio programming.
- Personnel who are not trained shall not perform configuration, maintenance, or repair work unless this work is performed under the direct supervision of trained and approved personnel.
- Technical staff shall stay up to date on current training and notify other sub-system administrators and the system administrator of any encountered problems and any resolutions.
- Technicians shall be familiar with applicable ISICS Standards.
- System and subsystem technical staff shall be familiar with site access procedures, equipment outage, and maintenance notification requirements of the ISICS Standards.
- Technical staff connecting to the radio network shall take reasonable efforts to maintain a clean computer that is free of malware and only used for work purposes. Technical staff shall follow all standards and best practices regarding security. Before they connect to the network, they shall work with the appropriate System Administrator to ensure they have the latest anti-malware protection on their computers, and the computers are free of malware.

5. Recommended Procedure

Agencies requiring contract services must enter into an agreement with the contractor providing service. The agreement will specify enforcement provision, including consequences of misuse and the release of non-public system security information consistent with Iowa Code 22.7(50).

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6. Management

The Statewide System Administrator, the appropriate Subsystem Administrators, and the contracting agencies are responsible for managing and maintaining the agreement process.

The Statewide System Administrator will:
- Facilitate the development of and maintain the current version of the best practices for the internal and external technical staff.
- Maintain a list of the overview/best practices trainers for the internal and external technical staff.

Sub-System Administrators are responsible to ensure that:
- Minimum training requirements of in-house staff are met.
- Only qualified personnel perform system maintenance functions.
- System technicians are familiar with all applicable sections of the ISICS standards.

Contracting Agencies shall:

- Ensure that these system standards are adhered to when using contract services.
- Ensure that only qualified personnel perform system maintenance work.
- Notify the appropriate Sub-System Administrator when contracting for service.